
City of Rye, New York Central Business District

Planning for Capital Improvements and Streetscape Enhancements



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SECTION I.

INTRODUCTION

This study was initiated in response to a variety of significant capital improvements that will be required in the Rye City Central Business District (CBD) over the next few years (see Figure 1). These improvements include sidewalk enhancements, street reconstructions, traffic signal upgrades and other necessary infrastructure projects. The implementation of these projects is a significant undertaking, but provides an opportunity to address other physical and aesthetic concerns in the CBD.

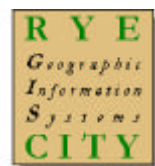
The purpose of this study is to identify these improvements as a basis for developing a coordinated strategy for their implementation. Section II of the report identifies various physical and aesthetic issues in the CBD and opportunities for enhancement to the Purchase Street streetscape. This section concludes with a rough cost of the anticipated improvements and a recommendation that the City retain a qualified professional to work with community representatives and City staff to develop a coordinated streetscape improvement plan.

The cost of any comprehensive streetscape program is significant and will require a variety of funding sources. Section III includes a discussion of alternative strategies to fund the capital improvements.

Purchase Street Streetscape



Figure 1:
Rye City Central Business District



Source: City of Rye, New York
Geographic Information System

Note: This map is intended for
general planning purposes only.

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SECTION II.

ISSUES AND OPPORTUNITIES

For the purposes of organization the following section is divided into separate elements of a streetscape such as the street, trees, sidewalks, etc. This organization however should not overlook the considerable inter-relationship of these elements. In many cases improvements or enhancements to one element can require changes to another.

Street

Purchase Street is a two-way road with parallel parking on both sides. At 38 feet it is relatively narrow considering its considerable daily traffic volume. Its narrowness and on-street parking contributes to congestion, but slow two-way vehicle speeds enhances the pedestrian experience and preserves the character of the Central Business District.



Photo 1: Purchase Street and Locust Avenue Intersection

Reconstruction

It is estimated that by 2005 Purchase Street through the CBD will require reconstruction and re-paving from Boston Post Road to Cedar/Highland. This is a significant capital project and is similar in scope to the Purdy Avenue reconstruction that occurred in 1998. A similar reconstruction is also required for Smith Street. This reconstruction was deferred until after the

completion of a recently approved development project. That project is now completed.

Prior Recommendations

Recommendations to improve traffic flow in the Central Business District date back to the 1920s. The 1946 City Master Plan entitled *On Our Way, The Rye Development Program*, recommended that Purchase Street be converted to a pedestrian mall and that surrounding roads be re-aligned, widened and expanded to accommodate traffic flow and parking. Other suggestions have included converting Purchase Street to one-way as a means of providing more on-street parking. These recommendations, however would significantly alter the character of Purchase Street, have considerable traffic implications, are potentially costly and may not provide substantial parking increases.



Photo 2: Purchase St./ Theodore Fremd / Purdy Intersection

Intersection Improvements

This report recommends less aggressive strategies to improve Purchase Street in order to preserve and respect Rye's existing character. The City should consider possible changes in the intersection of Theodore Fremd/Purdy to improve traffic flow. This intersection has among the greatest vehicle delays, due in part to the lack of dedicated turning lanes and the offset of Theodore Fremd and Purdy at Purchase Street. Given the location of existing buildings improving the alignment of these roads is not possible, however adding a turning lane on Theodore Fremd might be possible. This change in

configuration should be explored when the City pursues either the reconstruction of Purchase Street or the installation of new traffic signals at this intersection.

Pedestrian Walkways

The required reconstruction of Purchase and Smith Streets should include consideration of pedestrian walkways consisting of different material to better designate pedestrian areas and improve pedestrian safety. Currently, Purchase Street has 13 crosswalks. The crosswalks could be replaced with brick or stone pavers or other similar material. Colored concrete is a cheaper alternative, but not recommended since it typically loses its color, especially after a few winters of roadway salt applications. The continued practice of pavement striping is another acceptable solution, but requires regular maintenance.



Photo 3: Existing Purchase St. Crosswalks

Pedestrian Bump-outs

Pedestrian bump-outs¹ at intersections are an additional improvement to pedestrian safety, but are generally not recommended for Purchase Street. Purchase Street is relatively narrow and has relatively slow vehicle travel speeds, making it fairly easy to cross at intersections, thereby reducing the need for bump-outs. In addition, bump-outs may not be possible at some intersections since it would impact the turning radius of large vehicles, such as fire trucks. Bump-outs are worth considering if it is determined that additional sidewalk space is

¹ Pedestrian bump-outs are sidewalk areas that project into the street.

necessary to accommodate other street amenities such as street trees, street lights or traffic signals.

Mid-Block Crossings

Bump-outs at mid-block would be more acceptable since it could provide an additional pedestrian crossing of Purchase Street and an opportunity for additional tree planting where narrow sidewalks exist. Obviously, bump-outs would result in the loss of on-street parking. One possible location where this strategy might be effective is the block between Boston Post Road and Locust Avenue/Smith Street.

Sidewalks

There is approximately 33,000 square feet of sidewalk area along Purchase Street (see Figure 2). The sidewalks range in width from 4 to 16 feet, with an average width of approximately 8 feet. These sidewalks are narrow (maybe even too narrow) to comfortably accommodate the volume of pedestrian traffic (including that of the elderly and disabled) and required street trees, lights, traffic signals and other amenities.

Sidewalk Conditions

Many of the sidewalks along Purchase Street are in poor condition and should be replaced for aesthetic reasons or to remove tripping hazards. The sidewalks require regular replacement (roughly every 2 to 4 years) due, in large part, to heaving caused by street trees. The City is aggressive with its sidewalk replacement program in order to minimize its exposure to lawsuits, though there have been recent tripping incidents on Purchase Street that have resulted in injuries. In addition, the sidewalks lack a uniform or consistent pattern making them less than desirable from an aesthetic perspective.

The granite curbs are generally in good condition, though some are displaced by tree heave. Sidewalks are pitched at all intersections, but few meet ADA requirements.

Replace on As-Needed Basis

Based on a sidewalk inventory in March 2002 relatively few sidewalks need replacement to remove tripping hazards. Replacing on an “as-needed” basis would not address the short- and long-term maintenance concerns due to tree heave. It also provides a patchwork of improvements and does not

Purchase Street Streetscape

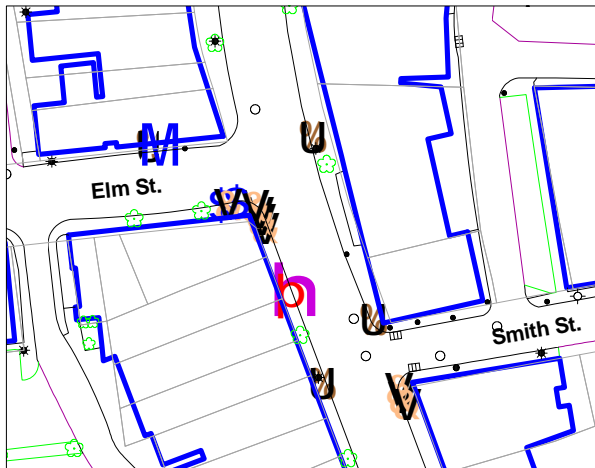
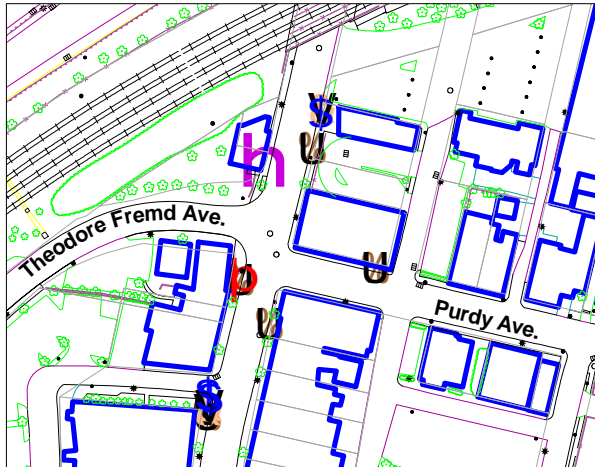
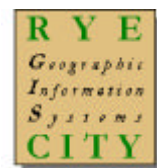


Figure 2:
Existing Conditions

Legend

- h Bus Stop
- b Fire Hydrant
- \$ Mailbox
- V Newspaper Box
- M Phones
- U Trash Can



Source: City of Rye, New York
Geographic Information System

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address uniformity and aesthetic concerns. Most liability issues, however, would be resolved at least for the short-term (say next 2 to 4 years).



Photo 4: Purchase St. Existing Sidewalk Conditions

Wholesale Replacement

A more expensive and disruptive strategy would be to replace all sidewalks at the same time. It is estimated that this replacement would cost approximately \$225,000. The benefits of this strategy are that uniform sidewalks would provide an aesthetic enhancement. This would include uniform material and scoring pattern. In addition, wholesale replacement would provide an opportunity to include brick ribbons along the street edge or similar enhancement if deemed desirable.

Tree heave issues could also be better addressed with a full replacement. For instance, tree roots could be managed and root barriers installed to minimize (but likely not eliminate) future heaving. A wholesale replacement would also be necessary if the City desires to simultaneously and comprehensively address all streetscape issues raised in this report, including that of sub-surface utilities.

Trees

The approximately 32 trees along Purchase Street are among the most challenging management issues in the CBD (see Figure 3). They significantly contribute to the character of the CBD

Purchase Street Streetscape

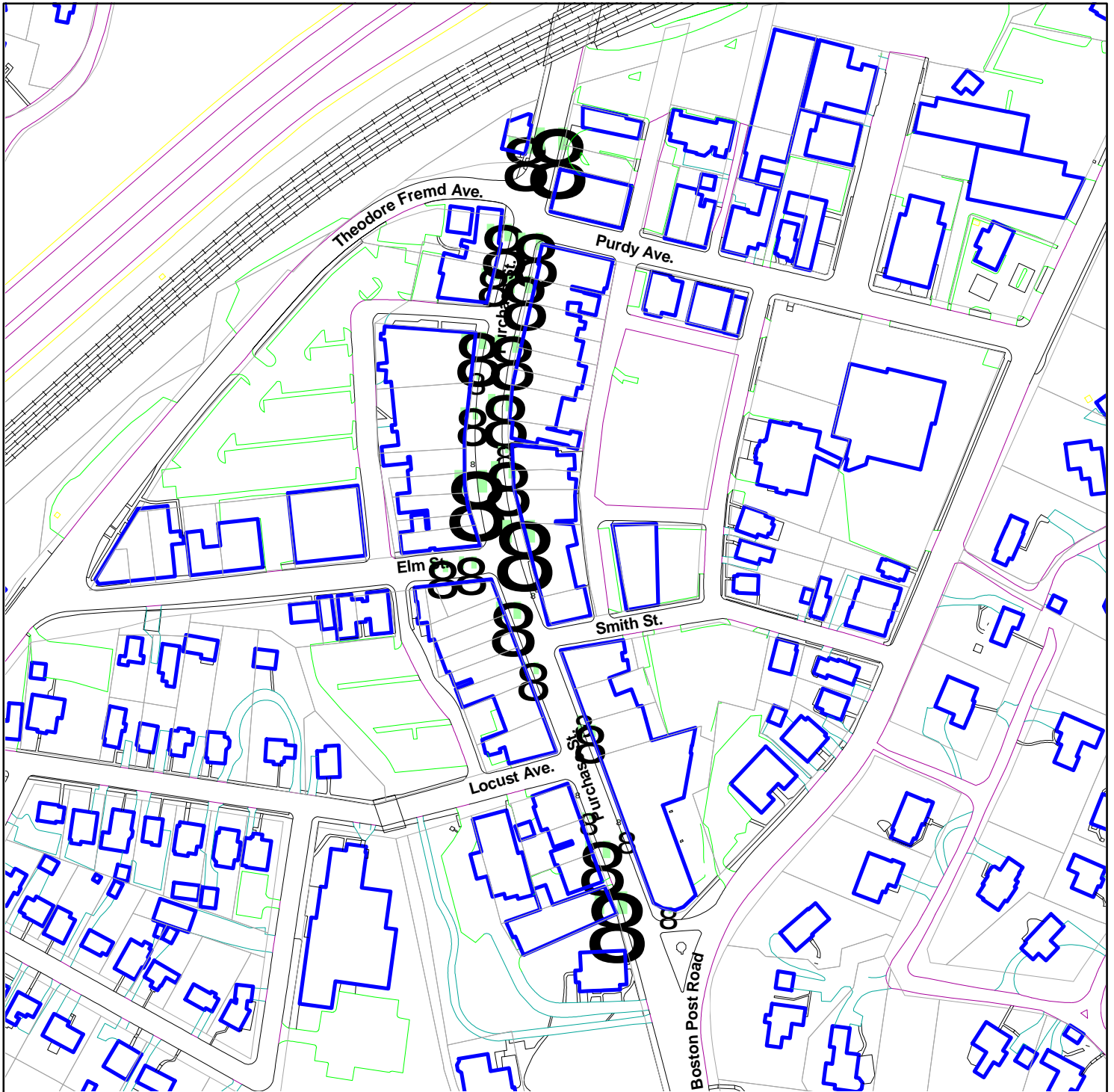
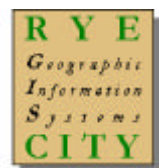


Figure 3:
Existing Trees by Canopy Size (Approx.)



Source: City of Rye, New York
Geographic Information System

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and provide shade and heat relief for pedestrians. Most of the trees are in good condition, with only two to five trees recommended for removal. Residents dedicated approximately six trees in 1992.

However, the mature trees (nearly half of which are Oaks with a tree diameter of 12 or more inches) cause problems. The trees heave sidewalks, creating significant obstructions and tripping hazards for pedestrians. Given limited planting area, trees may interfere with underground utilities and basements of some adjacent buildings. Since the trees lack reasonably sized tree boxes the roots are often exposed creating additional tripping hazards for pedestrians.



Photo 5:
Exposed Tree
Roots on
Purchase Street.



Photo 6:
Exposed Tree
Roots on
Purchase Street.

Remove Trees

One alternative is to remove the most problematic trees, which often means the largest trees with exposed roots. Some sidewalks are narrow and cannot reasonably accommodate large trees and eliminate pedestrian tripping hazards. From a legal/policy perspective, the City needs to evaluate its lawsuit

exposure and balance that against the impacts on the streetscape.

Care must be taken in removing trees so as to not disturb existing utilities or buildings. Grinding stumps results in the least disturbance (and cost), however it may not afford the opportunity to replace the tree in the same location. Stump removal may afford tree replacement in the same location, but would require existing sidewalk to be removed and more care so as to not disturb existing structures and utilities.

Tree Replacement

Removing large trees has a noticeable and significant character impact. To mitigate the impact of that loss, new replacement trees should be as large as possible. This is can be a challenge, since a large tree requires a large planting hole and more sidewalk removal at the time of installation. Smaller trees will require less short-term care after planting, however, the canopy height may block storefronts, which could concern merchants. In some cases it may not be possible to locate a new tree in the same location as an existing tree, however finding a new location that does not create pedestrian conflicts or conflicts with other street features, such as utilities, driveways, other trees, street signals or lights, etc. may not always be possible. In those instances, replacement of existing large trees may not be possible.

Tree Boxes and Grates

There are treatments at the base of each tree along Purchase Street, however they are not uniformly sized or treated and consist of brick, dirt, sand or stone. Each of these materials has their shortcomings. Brick can heave creating a tripping hazard. Dirt can be messy when it rains. Sand and stone can become displaced and tracked into merchant stores.

In some streetscapes tree boxes are installed, which provide multiple benefits including modest tree protection, planting area for additional landscaping and a measure to cover up exposed roots. Tree boxes along Purchase Street would be desirable for many reasons, however they are not recommended since the sidewalks are narrow and they would likely create more tripping hazards than they reduce.

A more appropriate treatment is one that is flush with the sidewalk such as a tree grate or brick. This will provide some aesthetic benefit and still allow this area to be used by pedestrians. It is noted, however, that even these measures could still result in tripping hazards and may require regular maintenance. In addition, tree grates may not be possible around some of the largest trees along Purchase Street.



Photo 7: Existing Brick Treatment Around Street Tree.

Tree Bump-outs

Among the narrowest sidewalks are on the east side of Purchase Street extending from Smith Street to Boston Post Road. Trees currently exist, however they are relatively small and do not have as significant an impact on pedestrian flow as other trees on Purchase Street. In this location, one or two tree bump-outs could be provided that would extend into Purchase Street. This strategy would preserve existing sidewalk space and provide more space for large trees. Obviously, on-street parking would be lost, but the bump-outs could be designed to also include a mid-block pedestrian crossing of Purchase Street.

Traffic Signals

Purchase Street has traffic signals at each intersection through the CBD including Theodore Fremd/Purdy, Elm, Smith, Locust

and Boston Post Road. The traffic signal poles consist of cast aluminum and in many instances also include luminaries.

NYSDOT Requirements

Pursuant to New York State Department of Transportation (NYSDOT) requirements all traffic signals in the City, including those on Purchase Street, are being upgraded to provide dual indication heads for each direction. This is a significant issue since the number of signals along Purchase Street will likely double. Currently, one pole and one traffic signal control these intersections, affording a very efficient use of limited sidewalk space. Compliance will also require more signal poles that will use limited sidewalk space, contribute to visual clutter in the area and likely impact the character of the streetscape.

The City should explore deviating from the NYSDOT dual signalization requirement. The intent of the provision is to have a fully controlled intersection in the event one or more signal is out of service and to improve the visibility of signals. The requirement is excessive given the character and prevailing speeds along Purchase Street and may have adverse impacts on pedestrians given limited sidewalk width. The City will need to consider any liabilities it may be exposed to in the event it does not comply with NYSDOT standards. If dual signalization is provided careful design will need to be considered to minimize the impact of additional signals and poles.



Photo 8: Existing Traffic Pole with Single Signal Indication.

New Signals

New traffic signals should consist of a design that respects the character of Purchase Street. Many vendors now provide signals, mast arms and poles with a wide variety of styles and colors. It is recommended that the City consider signals with an appropriate design (possibly historic in character) consisting of a dark color such as black or dark green. It is noted, however, that many of these designs include wide bases (often between 20"-30" in diameter) that will occupy considerable sidewalk space at congested intersections.

Infrastructure

The infrastructure in the CBD is old. Many of the stormwater and sewer lines in the CBD date to their original installation in 1908. Prior to any major capital improvement these lines should be inspected to determine if any replacement or repairs are needed. In many cases these lines are located either under Purchase Street or sidewalks (see Figure 4). The most appropriate time to make such repairs is during the re-construction of Purchase Street.

Streetlights

There are a dozen streetlights along Purchase Street. The luminaries are approximately 30-35 feet in height. They are Cobra-type lights that are more suited to a major roadway than a main street environment such as Purchase Street. Aesthetic impacts of these lights, however are mitigated by the existing tall street trees, which screen the lights fairly effectively even in winter months. The bases of these lights are also relatively small (roughly one square foot), requiring relatively little sidewalk space.

Streetlight Replacement

The existing lights are functionally acceptable, however from an aesthetic perspective they are less than desirable. A wide variety of lights now exist that would be more consistent with the character of Purchase Street if the existing streetlights were replaced. The number, height and type of streetlights present important issues to consider. For instance, if new lights were installed the City should consider reducing the spacing between lights to approximately 100 to 150 feet. This would permit a

Purchase Street Streetscape

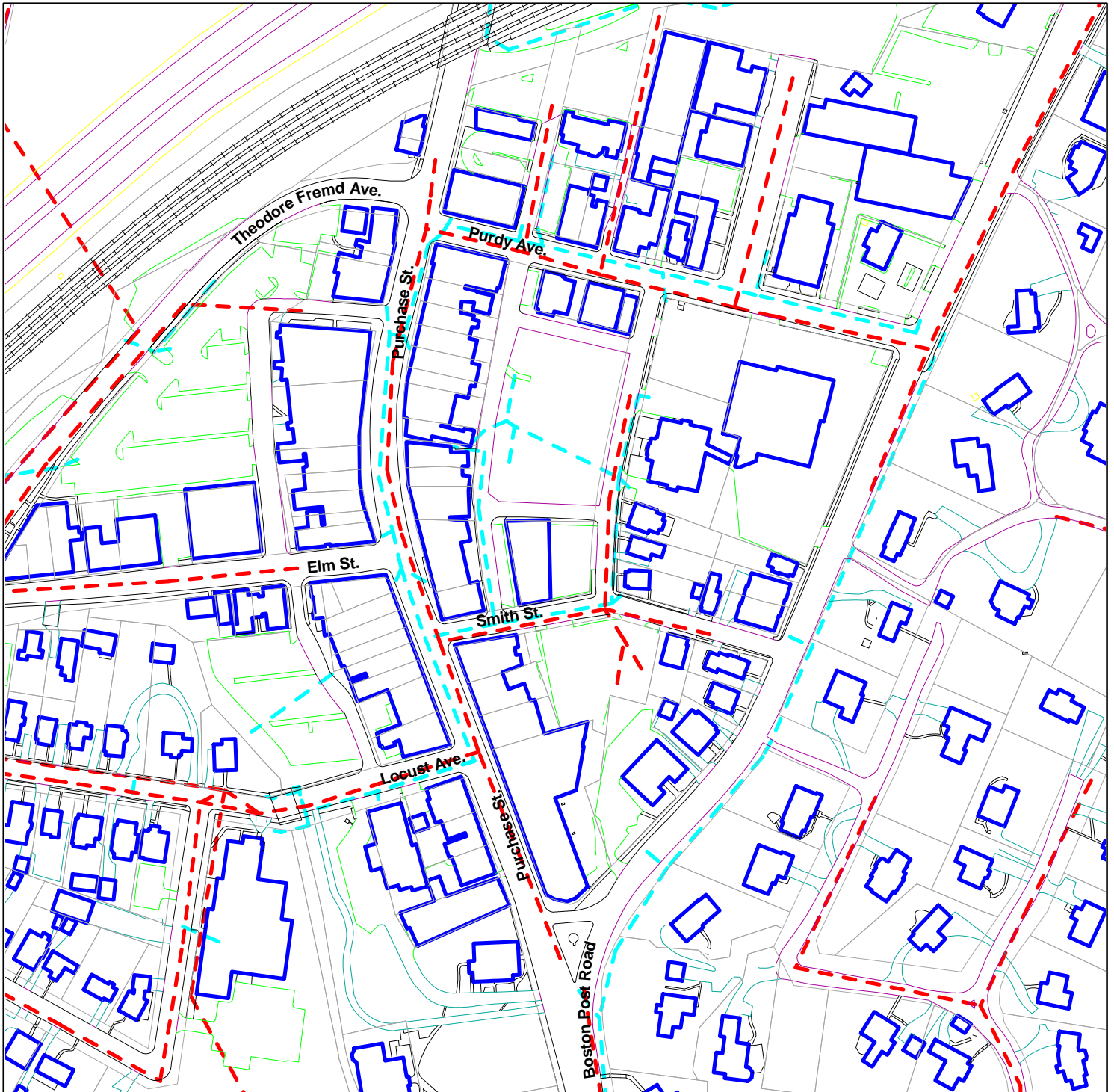


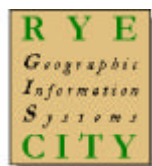


Figure 4:
Existing Storm Drain and Sewer Lines

 Sewer Lines
 Storm Drain Lines



Source: City of Rye, New York
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lower streetlight height and enhance the streetscape character. Care should be taken in locating new streetlights to avoid conflicts with other structures and street trees. Additional streetlights would also require additional expense in related to installing new electrical conduits. The installation of new or additional streetlights should be considered particularly if the City is considering replacing the sidewalks in the CBD. As new sidewalks are installed conduits for electrical service should be installed at the same time.

Street Amenities

Street amenities include a broad category of streetscape elements including trashcans, mailboxes, furniture, planters, newspaper boxes and seasonal displays. The following provides a brief discussion of those elements and recommended enhancements.

Refuse Containers

The City currently maintains roughly 14 trashcans along Purchase Street. Trash pick-up occurs three times a week, however, there are regular instances where the trash cans overflow. The City should consider installing new trashcans more consistent with the Purchase Street character. Providing additional trashcans to accommodate peak needs is possible, however impacts on pedestrian flow will need to be considered.

Mailboxes

There are roughly seven mailboxes along Purchase Street many of which are located at intersections. The City should work with the Post Office to reduce the number of mailboxes or request that they be relocated away from the narrowest portions of the sidewalk.

Newspaper Boxes

There are roughly eleven newspaper boxes along Purchase Street many of which are clustered at intersections. These boxes contribute to visual clutter and are located at the narrowest sidewalk segments in the CBD. The City should work with the newspaper vendors in light of Constitutional considerations to recommend alternative locations at wider sidewalk segments to minimize impacts on pedestrian flow.



Photo 9:
Existing Refuse
Containers on
Purchase Street.



Photo 10:
Existing
Newspaper
Boxes on
Purchase Street.

Seasonal Amenities

The City provides pole-mounted American flags, wreaths and faux-lanterns during holidays. The City should continue this tradition and if new streetlights or traffic signals are installed accommodations for these amenities should be considered.

Street Furniture/Planters

Throughout the CBD merchants have placed landscape planters and street furniture along the sidewalks. These amenities enhance the character of Purchase Street, but are not provided by the City. This kind of merchant initiative should continue to be encouraged, however the City should consider incorporating these amenities as part of its coordinated streetscape program.

Conclusion

It is estimated that the cost to implement the streetscape improvements noted above would be about \$1.5 million. Of this amount approximately \$1.36 million would be for improvements and the remaining \$140,000 would be for other planning and design costs. This cost does not include other significant improvements such as the redesign (if any) of the Purchase Street/Theodore Fremd/Purdy Avenue intersection or the significant replacement of sub-surface utilities.

Before such funding is committed, however, it is recommended that the City retain a qualified professional to develop a detailed plan for the coordinated implementation of the streetscape program (see Figure 5). As with any plan of this nature public involvement should be incorporated as part of the planning process. It is recommended that the City and consultant work with a designated committee or some other existing entity consisting of Rye residents, CBD merchants, property owners and other involved parties. The cost and scope of the project could change based on the input

Purchase Street Streetscape

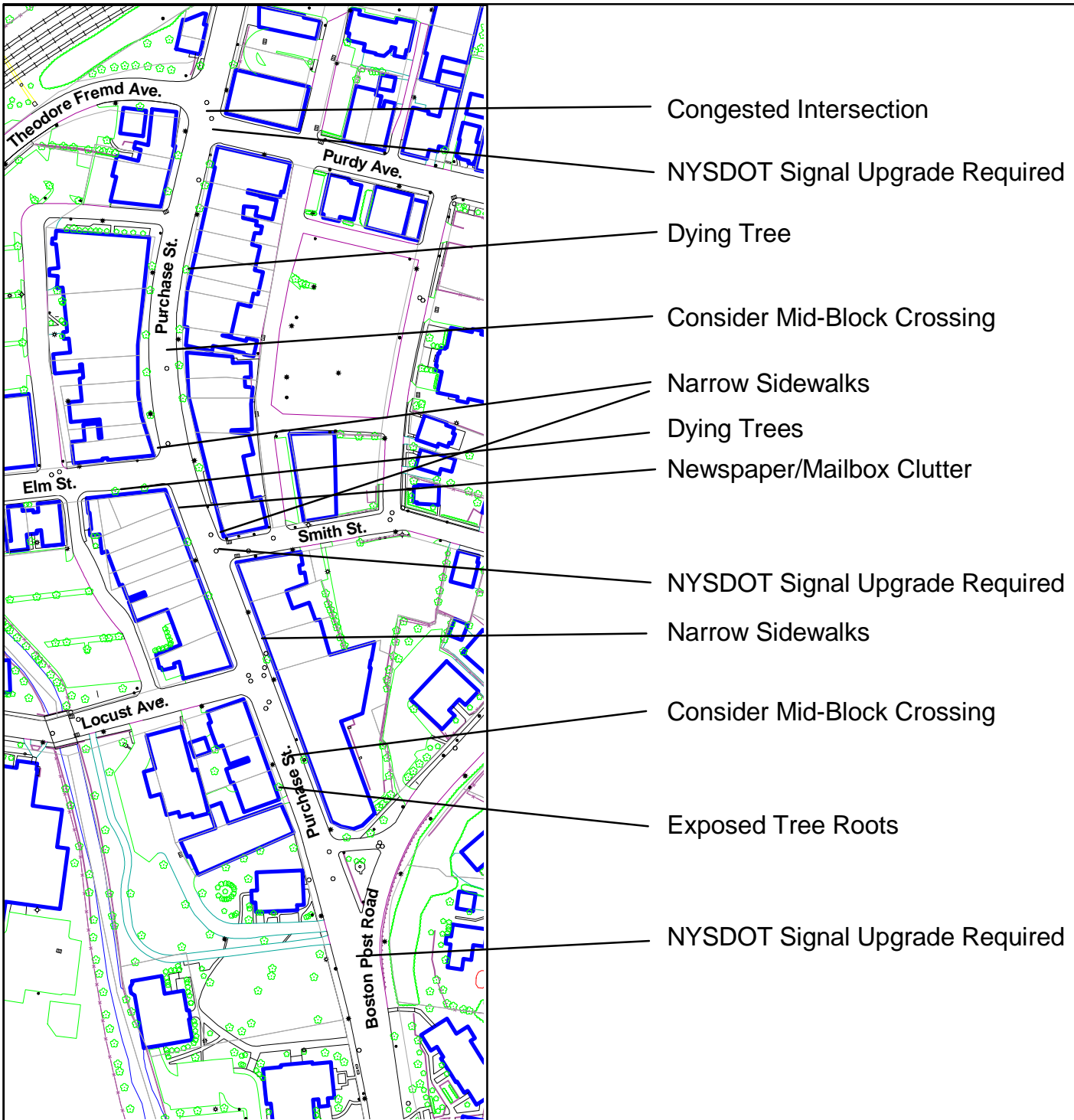
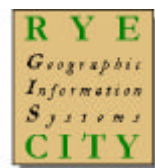


Figure 5:
Existing Streetscape Issues and Opportunities



Source: City of Rye, New York
Geographic Information System

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SECTION III.**FUNDING STRATEGIES**

As with any significant capital project figuring out how to pay for it is always an important concern. With creativity and advanced planning these cost implications can be overcome. The following provides a discussion of some funding strategies the City should consider. It is important to note that no one strategy will address the City's funding needs. Multiple strategies will likely be required to be implemented and must be in place for a few years before significant revenue is generated.

Capital Improvement Program

As with any capital improvement of this magnitude the first and most obvious source of programmed funding is the City's Capital Improvements Program (CIP). The Purchase Street Reconstruction is in the current 2003-2007 CIP. There are insufficient funds to implement the project in 2003. Design is scheduled for 2004 with implementation to occur in 2005.

Grants

Some New York State and Federal grants are available for certain activities included as part of the streetscape plan. The City will pursue these grants where eligible requirements are met. New York State just introduced a "Main Street New York" grant that provides cities with less than 50,000 people up to \$25,000 for beautification and other infrastructure improvements within central business districts.

Given the Central Business District's proximity to the Rye Train Station there may be Federal (such as TEA-21) funds for pedestrian improvements in and around public transportation centers. Rye will likely not be eligible for the most common source of federal funding for streetscape improvements, Community Development Block Grants (CBDG), because the CBD area exceeds the maximum income requirements of the program.

Business Improvement District

The City should consider, with appropriate public and legal input, establishing a business improvement district (BID) for some or all of the CBD. BIDs are common in New York State, but are typically used for larger cities. They are a special assessment that is applied to properties within a defined area. These properties pay an additional tax (making them obviously controversial) but can be palatable since the revenue that is

generated is set aside for projects only within the BID. Currently, tax revenue generated from commercial properties in the CBD goes into the general fund, which funds can be used for capital improvements both within and outside the CBD.

A BID can be discontinued after the streetscape project is funded or it can be used as a reoccurring source of revenue for other capital improvements, maintenance or other programs in the CBD. With over \$2 million in assessed property value along Purchase Street alone, significant revenue could be raised over time with relatively modest cost implications to current property owners.

Private Contributions

The City should pursue contributions and donations for streetscape enhancements from private or other appropriate individuals or organizations. Purchase Street has a history of such contributions. Some of the existing street trees, for instance, were donated to the City and are marked with plaques. The Rye Merchant's Association and City garden club maintain some of the planted pots and landscaped areas in the CBD. The City should continue to accept these and other contributions, provided they are consistent with the overall streetscape program and are not accompanied by long-term commitments that significantly add to operating expenses or are encumbered with unmanageable conditions.

Land Use Exactions

The City should explore implementing either voluntary or mandatory contributions towards a streetscape enhancement fund for land use applications approved by the Planning Commission in the CBD. Such exactions must be carefully designed to be reasonable and proportional to each application. There must also be a nexus between the impact of each application and its contribution towards a pre-defined streetscape improvement plan and fund.